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Before the
Federal Communications Commission
Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers	)	CC Docket No. 95-185

COMMENTS OF KMC TELECOM INC.

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SUMMARY

KMC Telecom Inc. ("KMC") is a competitive local exchange carrier ("CLEC") providing facilities-based competitive local and long distance services in 17 states and Puerto Rico. KMC has installed state-of-the-art networks in a number of cities throughout the Southeast and will soon build or complete similar networks in several other cities in the Southeast and in the Midwest. KMC supports the Commission in its efforts to revise its unbundled network element ("UNE") rules in the light of the Supreme Court's recent ruling in *AT&T v. Iowa Utilities Board* ("*Iowa Utilities Board*"). Despite the fact that this decision vacates the Commission's UNE rules, it also makes clear that the Commission retains broad discretion to craft rules giving effect to the 1996 Act. The Commission should exercise this discretion by re-validating much of the approach it adopted in the *Local Competition Order* while giving substance to Section 251(d)(2) in accordance with the *Iowa Utilities Board*. The Commission should once again establish a list of UNEs which must be made available nationally, but should not apply the essential facilities doctrine when analyzing which UNEs must be unbundled.

Determining which elements must be unbundled under Section 251(d)(2) requires that the Commission consider whether access to proprietary network elements is necessary, and whether the lack of access to a non-proprietary network element will impair the ability of a CLEC to provide service. The Commission should establish definitions of "necessary" and "impair" based on the extent to which use of alternatives to ILEC network elements would materially adversely affect the ability of competitive providers to provide service in terms of cost, quality, ubiquity, and timeliness of service. The Commission should recognize that few, if any, ILEC network

elements are proprietary ones to which the more stringent "necessary" standard would be applicable.

The Commission should reestablish the initial seven UNEs identified in the *Local Competition Order*. In addition, the Commission should draw upon the experiences of the past several years and identify additional UNEs that would promote the ability of CLECs to provide competitive services. Specifically, the Commission should designate as UNEs: conditioned loops, inside wiring, sub-loop elements, multiplexing, dark fiber, combinations, DSLAMs, high capacity transport options, and data network elements.

Once established, the Commission should adjust the national list of minimum UNEs by periodic reviews based on industry conditions. KMC does not believe that it is possible to know in advance when any network elements should be removed from the list. Accordingly, the Commission should not establish sunset dates.

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REPLY COMMENTS OF KMC TELECOM INC.

KMC Telecom Inc. ("KMC"), by its undersigned counsel, submits these comments in response to the Commission's Notice of Proposed Rulemaking in the above-captioned proceeding.[1] This proceeding concerns access to unbundled network elements ("UNEs") and was initiated in response to the Supreme Court's decision in *AT&T v. Iowa Utilities Board* ("*Iowa Utilities Board*").[2] This ruling vacated the Commission's initial rules defining which UNEs incumbent local exchange carriers ("ILECs") must make available pursuant to Section 251(d) of the Telecommunications Act of 1996 ("1996 Act" or "Act").[3] KMC urges the Commission to maintain access to UNEs as a practical way of promoting entry into the local telecommunications marketplace. KMC believes that

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[1] *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, CC Docket Nos. 96-98 & 95-185, Second Further Notice of Proposed Rulemaking, DA 99-70 (rel. April 16, 1999) ("*UNE NPRM*").

[2] *AT&T Corp. v. Iowa Utilities Board*, 119 S.Ct. 721 (1999) ("*Iowa Utilities Board*").

[3] 47 U.S.C. § 251.

this should be accomplished by reestablishing the existing UNEs and by designating new ones as discussed below.

I. THE COMMISSION SHOULD ESTABLISH A LIST OF MINIMUM UNEs TO BE PROVIDED ON A NATIONWIDE BASIS

KMC believes the Commission should adopt its tentative conclusion that it should establish a national minimum set of UNEs that all ILECs must offer as a means of furthering the pro-competitive goals of the Act.[4] There is nothing in the Supreme Court decision that would limit the ability of the Commission to apply the statutory standards for identification of UNEs or establish a minimum list of UNEs. Moreover, *Iowa Utilities Board* upheld the general authority of the Commission to establish rules implementing the local competition provisions of the Act.[5]

In addition, the alternative approach of having states establish UNEs would constitute a substantial entry barrier for CLECs. A national list of UNEs would provide for a more efficient implementation of the Act by avoiding the need for separate proceedings at the state and federal levels each time a CLEC requests that a network element be unbundled. Establishing national uniformity in access to UNEs would ease burdens on new entrants by avoiding the need for market entry plans to address varying access standards. Consequentially, a national minimum list of UNEs would better facilitate the development of competition and promote the goals of the Act than permitting state-by-state unbundling.

KMC also submits that there are no strong policy reasons militating against establishment of a national list of minimum UNEs. Neither economic nor technical conditions vary across the

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4 *UNE NPRM* at ¶14.

5 *Iowa Utilities Board*, 119 S.Ct. at 730.

country to such an extent as to override the need for a national minimum list of UNEs. Moreover, Section 251(f) of the Act anticipates the possibility that exemptions from unbundling and other obligations applicable to ILECs may be appropriate as market conditions develop. Thus, the need for exemptions can be addressed through that section as the need arises rather than by altering the preexisting federal policy in favor of a national minimum list of UNEs. Accordingly, KMC believes that the Commission should reestablish its policy regarding a national minimum list of UNEs.

The Commission should also make clear that states may not apply the standards set forward in the Act to establish an independent lists of UNEs separate from the national list. Instead, states should only be permitted to establish additional UNEs not contained within the minimum national list, and then only pursuant to federal rules that the Commission establishes in this proceeding. The Commission should also make clear that states may not remove UNEs from the national list. These measures will assure that the national minimum list of UNEs remains intact, and that states do not adopt conflicting decisions that could thwart the achievement of federal objectives in the name of advancing local concerns. At the same time, the ability of states to establish supplementary UNEs will provide the states with considerable flexibility to address any special local conditions.

II. THE COMMISSION HAS A WIDE DEGREE OF DISCRETION WHEN ESTABLISHING UNEs

The Act provides the Commission with considerable discretion in deciding which network elements must be unbundled. The Supreme Court's ruling in *Iowa Utilities Board* does not change this fact.[6] In the first instance, the Act does not define "necessary" or "impair," but rather leaves that task to the Commission. There is nothing in the legislative history indicating specific legislative

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[6] *See id.*

intent with respect to the definitions or scope of these terms. Had Congress intended to narrow the Commission's authority in this area it would have done so directly. Instead, Congress delegated to the Commission the authority to establish rules and standards for determining which network elements must be unbundled.

Nor did the Supreme Court give the Commission specific guidance on what UNEs should be made available. Rather, the Supreme Court only found that the Commission had not adequately considered the Section 251(d)(2)'s "necessary" and "impair" standards.[7] The Supreme Court ruled that in deciding which network elements must be unbundled, the Commission must apply "some limiting standard, rationally related to the goals of the Act."[8] It determined that the Commission's prior application of the Section 251(d)(2) was inadequate and directed the Commission to consider the availability of elements outside the incumbent's network.[9]

KMC believes compliance with *Iowa Utilities Board* requires that the Commission establish some standards under Section 251(d)(2), rationally related to the goals of the Act, which limit the requirement that ILECs make their network elements available to competitors. These limiting standard must provide for the consideration of the availability of network elements from sources independent of the ILEC. However, there is nothing in *Iowa Utilities Board* to indicate that analysis under these limiting standards could not be achieved by considering a number of possible limiting factors that could establish substantial limits either individually or collectively.

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7 *Id.* at 736.

8 *Id.*

9 *Id.*

KMC believes that the Commission can, and should, consider a variety of possible limiting factors that address the statutory construction issues raised by the Supreme Court. These factors should illustrate the degree to which the pro-competitive purposes of the Act are advanced by making a given network element available. As discussed above there is nothing in the statute or the Supreme Court decision either dictating or limiting the factors the Commission may consider. Thus, for example, the Commission may choose to consider the ones that promote a wider availability of UNEs if the Commission determines that this approach would best achieve the goals of the Act. KMC urges the Commission to do so and to exercise the discretion it has under the Act and the Supreme Court decision to designate a broad list of UNEs that ILECs must make available.

III. THE "NECESSARY" AND "IMPAIR" STANDARDS

A. Analysis Under The "Necessary" And "Impair" Standards Should Take Into Account The Technical And Economics Realities Of The Marketplace

As discussed above, *Iowa Utilities Board* requires that the Commission apply "some limiting standard, rationally related to the goals of the Act" when deciding what UNEs must be unbundled. In doing so, the Commission must consider the availability of elements outside the incumbent's network.[10] Of course, every network element, even local loops, can be duplicated if time and resources are unlimited. Thus, identification of the network elements to be unbundled under Section 251(d)(2) necessarily turns on the degree of availability as an economic and procedural matter from sources independent of the ILEC.

KMC believes that cost, quality, and timeliness of service are the appropriate criteria for assessing the economic and practical impact of the unavailability of a given network element. Thus,

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[10] *Id.* at 735-36.

analyzing whether access to a network element is "necessary," or its absence would "impair" the ability of CLECs to provide service requires that the Commission consider the extent to which obtaining a network element from sources independent of the ILEC, including self-provisioning, would increase the cost of the element to the competitor, diminish the quality of service it could provide, and delay the provision of service.

For example, the Commission could determine that access to a proprietary network element is "necessary" when its unavailability as a UNE would make it impossible, as a practical or economic matter, for the competitor to provide a service at the same price and quality and in the same time frame as the ILEC. The Commission could determine that the unavailability of a network element would "impair" a competitors ability to provide service when that would, as a practical or economic matter, materially or significantly lessen its ability to provide a service at the same price and quality and in the same time frame as the ILEC. This approach would establish definitions of "necessary" and "impair" that would create genuine limits on the network elements that must be unbundled. Additionally, this approach would permit access to all UNEs which are imperative for the provision of competitive services as measured by the potential effect of non-provisioning in terms of cost, quality, or timeliness of service.

B. Analysis Under Section 251(d)(2) Should Not Favor Any Permissible Entry Strategy

The 1996 Act establishes a number of permissible market entry strategies. For example, new entrants may seek temporary access to UNEs as a way of entering markets while they build-out their own facilities. Others may have business plans in place which require facilities-based provision of service in some markets while relying upon UNEs in others. Still others may plan to use UNEs to

the full extent possible without building facilities. Any of these entry strategies can form the basis for provision of competitive services and thus would promote the achievement the pro-competitive goals of the Act.

Furthermore, the differing business plans of carriers may be the best reflection of the individual economic and practical realities faced by carriers in attempting to obtain network elements from sources other than the ILECs. Even if some network elements are available from sources independent of the ILECs, some CLECs may not be able to purchase or use them with the same utility in all areas in which they could otherwise provide service.

KMC cautions the Commission not to establish its national list of UNEs based on the business strategies of any single segment of the competitive industry. Rather, the pro-competitive goals of the Act are more likely to be fully realized if the Commission adopts a flexible approach that permits a variety of competitive business plans and recognizes the differing economic realities facing different competitors in the market.

Accordingly, the KMC recommends that the Commission apply the "necessary" and "impair" standards in such a way as to promote competitive entry. The Commission should refrain from applying these standards in such a way as to choose winners and losers among the existing entry strategies. If the record suggests that access to a network element is necessary for some CLECs, or that its unavailability as a UNE would impair their ability to provide service, then the Commission should add it to its list of UNEs even if other CLECs do not need it as a UNE.

C. The Essential Facilities Doctrine Is Inappropriate For Use In Determining Which Elements Must Be Unbundled

The Commission asked for comment on the essential facilities doctrine and the role it should play in identifying which network elements must be unbundled.[11] The essential facilities doctrine is a judicially created doctrine of antitrust law. Its roots can be traced back to the Supreme Court's 1912 decision in *United States v. Terminal Railroad Association*, and has been developed and refined in a long line of subsequent decisions.[12] Although well established, the doctrine has been severely criticized by some of today's leading antitrust scholars.[13] KMC believes that the essential facilities doctrine is not well suited for application in the present instance and should not be applied.

KMC believes that application of the essential facilities doctrine would be inconsistent with the 1996 Act. In the first instance, the legislative history of the 1996 Act indicates that Congress did not intend to bind the Commission to judicially established doctrine.[14] There is nothing in the legislative history to indicate that Congress intended the Commission to employ the essential facilities doctrine when determining what network elements must be unbundled. Section 251(d)(2) itself uses a "necessary" standard for the unbundling of proprietary elements and an "impairment"

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[11] *UNE NPRM* at ¶ 22.

[12] *United States v. Terminal Railroad Association*, 224 U.S. 383 (1912); *see, e.g., MCI Communications Corp. v. AT&T,* 708 F.2d 1081, 1132-33 (7th Cir. 1982) (reviewing modern cases).

[13] The doctrine has been severely criticized by the leading commentators. *See* IIIA Areeda and Hovenkamp, *Antitrust Law* ¶ 771c (1996) ("Areeda and Havenkamp") ("Lest there be any doubt, we state our belief that the 'essential facility' doctrine is both harmful and unnecessary and should be abandoned.").

[14] *See* 141 Cong. Rec. S 7889-01 (June 7, 1995) (Sen. Pressler) (the1996 legislation was intended to "terminate the involvement of the Justice Department and the Federal courts in the making of national telecommunications policy").

standard for other elements. As a purely definitial matter, the word "necessary" might be read as equivalent to "essential," although the term "necessary" is probably better understood to be a weaker term.[15] But regardless of this distinction, the question arises why Congress did not use the term "essential facilities" if it in fact intended to incorporate a specific judicial doctrine carrying that name into Section 251(d)(2).

As for the "impairment" standard established by section 251(d)(2)(B), it cannot be reconciled, even on a strictly definitional basis, with the "essential facilities" doctrine. The essential facilities doctrine requires a showing that the facility is "essential to the plaintiff's survival in the market" and is "not available from another source or capable of being duplicated by the plaintiff or others."[16] By contrast, the dictionary definition of "impair" is "to make, or cause to become, worse; diminish in value, excellence, etc.; weaken or damage."[17] If a facility is "essential to survival in the market" and is "not available from another source or capable of being duplicated," as set forth in the essential facilities doctrine, then denial of access does not merely "weaken or damage" a competitor's ability to compete, rather it eliminates its ability to compete. Thus a mere showing of "impairment" cannot be reconciled with employment of the essential facilities doctrine; and to read the "essential facilities" doctrine into the "impairment" standard would be a distortion of the statutory language.

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[15] For example, one definition of "essential" is "*absolutely* necessary; indispensable" (emphasis added). *Random House Unabridged Dictionary* 487 (1981).

[16] Areeda and Hovenkamp at ¶ 773b.

[17] *Random House Unabridged Dictionary* 713.

Furthermore, the essential facilities doctrine is fundamentally at odds with one of the basic premises of the 1996 Act, which is that there should be a variety of competitive entry strategies.[18] As discussed above, the essential facilities doctrine requires that the facility be "essential to the plaintiff's survival in the market" and "not available from another source or capable of being duplicated by the plaintiff or others."[19] Thus the doctrine is confined to situations in which the *only* feasible competitive entry strategy is to use the "essential" facility. As soon as it is admitted that a variety of feasible strategies exist, some of which may not require use of the facility, then the facility is not "essential" and the doctrine does not apply.[20] Accordingly, if the essential facilities doctrine were to be employed as a measure of the unbundling obligation, unbundling would never be required where a variety of entry strategies are feasible, even though Congress assumed competitive entry through unbundled elements would be only one of a variety of entry strategies under the Act.[21]

Another indication of the inapplicability of the essential facilities doctrine is that in the 1996 Act "many practices in the nature of refusals to deal are simply forbidden," without the need for a case-by-case showing of market power and anti-competitive effects that would otherwise be required by Section Two of the Sherman Act.[22] Thus, ILECs obligations under the Telecommunications Act are significantly broader than those created under Sherman Section Two.[23]

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18 *See Local Competition Order* at ¶ 12.

19 Areeda and Hovenkamp at ¶ 773b.

20 *MCI Communications Corp. v. AT&T,* 708 F.2d 1132-33.

21 *See Local Competition Order* at ¶ 12.

22 Areeda and Hovenkamp at ¶ 785b, p. 277.

23 *Id.*

Therefore, KMC urges the Commission not to apply this doctrine when employing Section 251 to determine which UNEs must be unbundled.

IV. CONSTRUCTION AND APPLICATION OF SECTION 251(D)(2)

A. There Are Very Few "Proprietary" Network Elements To Which The "Necessary" Standard Should Apply

KMC believes that the Commission has properly interpreted the Act in determining that "necessary" only applies to "proprietary" network elements. This it the only reasonable interpretation of the plain language of Section 251(d)(2)(A). Moreover, there is nothing in the statute or its legislative history indicating any congressional intent to require that "proprietary" be given an expansive interpretation. KMC therefore submits that the Commission should craft a definition of "proprietary" that narrowly restricts the range of network elements that would be subject to the "necessary" standard.

KMC believes that there are only a few instances in which network elements could be considered proprietary under any reasonable definition of that term. By necessity, most network equipment and services are non-proprietary given the need for compatibility and inter-operability of interconnecting networks. Proprietary network elements, for all practical purposes, are not deployed in ILECs networks because that would preclude the ability of ILECs and other carriers to obtain compatible interconnection. None of the Commission's original seven UNEs or those discussed below should be considered proprietary.

B. The Commission Can Consider Factors In Addition To The "Necessary" And "Impair" Standards

Section 251(d)(2) provides that the Commission will consider "at a minimum" the "necessary" and "impair" standards in determining what UNEs should be available. KMC submits

that this direction clearly allows the Commission to consider other factors in addition to the "necessary" and "impair" standards. While the Supreme Court made clear that the Commission may not ignore these criteria, there is nothing in *Iowa Utilities Board* that indicates that the Commission may not consider other factors in conjunction with these criteria in determining what network elements must be made available as UNEs.

Accordingly, the proper interpretation of this Section permits the Commission to balance the "necessary" and "impair" standards against other factors. KMC submits that the most important additional factor the Commission should consider is the extent to which the availability of a network element as a UNE would help achieve the pro-competitive goals of the Act. If the unavailability of a network element would make it less likely that the pro-competitive goals of the Act would be achieved, then the Commission should consider this when deciding whether a given network element should be unbundled.

V. THE NETWORK ELEMENTS WHICH MUST BE UNBUNDLED

A. The List Of Seven Minimum UNEs Established In The Local Competition Order Should Be Reestablished

As discussed above, the Commission has considerable discretion in balancing relevant factors and designating network elements as UNEs. Moreover, in *Iowa Utilities Board* the Supreme Court ruled that the Commission needed to provide a better explanation under the "necessary" and "impair" standards, not that it could not reestablish the seven minimum UNEs.[24] As explained more fully below, KMC believes that reestablishment of the original UNEs is consistent with the "necessary"

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[24] *Iowa Utilities Board,* 119 S.Ct. at 736.

and "impair" standards and the guidance provided by the Supreme Court and would further the pro-competitive goals of the Act.

KMC believes that the factors cited by the Commission in the *Local Competition Order* support its decision to unbundle each of the elements on the original UNE apply with equal force today and would meet the requirements of Section 251(d)(2)'s "impair" standard.[25] None of these elements is sufficiently available in terms of price, quality, quantity and timeliness of provisioning such that its unavailability as a UNE would not materially impair competitors' ability to provide services. Accordingly, the Commission should reestablish them as UNEs.

KMC also points out that eliminating any of these UNEs at this point could create significant disruption in the competitive communications marketplace. Nearly all CLECs are employing these UNEs to a greater or lesser extent and their abrupt termination of access to them at fair and reasonable rates could force some carriers to cease operation in some instances. If the Commission were to decide that some of original UNEs do not meet the "impair" standard, it should permanently grandfather any current use of them.

1. The Local Loop

KMC fully supports the Commission's "strong expectation" that loops will be subject to the unbundling obligation of Section 252(c)(3).[26] For all practical purposes, there are no alternatives to use of ILEC loops in provision of competitive local services. While on a theoretical basis with unlimited time and resources parties could duplicate local loops, the requirement that they do so

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[25] They would also meet the "necessary" standard although that is irrelevant because none of them is proprietary.

[26] *UNE NPRM* at ¶ 32.

would do more than impair their ability to provide service. It would virtually foreclose meaningful competition in provision of local services. Accordingly, the Commission should redesignate loops as UNEs.

KMC believes that it is critical that the Commission define the local loops subject to the unbundling obligation broadly in order to assure the viability of a variety of market entry strategies at this early stage of competition, and to facilitate the rapid deployment of advanced broadband services. At a minimum, therefore, the Commission should require the unbundling of: 2-wire voice grade analog loops, 2-wire Integrated Services Digital Network ("ISDN") lines, 4-wire DS-1 lines, and 2-wire and 4-wire loops that are conditioned to transmit digital signals in order to provide advanced broadband services. Furthermore, the loop should be made available as high capacity and dark fiber where available.

2. Interoffice Transmission Facilities

ILEC networks provide ubiquitous transport to virtually every end office in their services areas. Competitive providers of transport do not even come close to offering a comparable coverage. Nor do competitive providers make available small units of transport capacity at TELRIC prices. Therefore, especially for CLECs that may only need small amounts of transport capacity, it is not realistic to expect that CLECs could provide service at the same cost or within the same time frame if they were required to self-provision or obtain transport from sources independent of the ILEC. Instead, that approach would lead to diminution in service quality, at a minimum in terms of areas

where service could be provided, increased cost, and delays in providing service. Accordingly, the Commission should keep interoffice facilities on the national UNE list.[27]

3. Local and Tandem Switching

As noted by the Commission in the *Local Competition Order*, there are 23,000 central office switches in the United States and it is unlikely that competitors could duplicate even a small percentage of these switches.[28] The Commission also recognized that it takes between nine months and two years to install a switch.[29] These findings remain valid.

KMC, as a facility-based provider, does not obtain its switching capabilities from outside sources and has no plans to do so in the future. Nevertheless, KMC believes that switching should be made available on an unbundled basis so that those companies with business plans requiring unbundled switching may have access to it as the need arises. KMC submits that a national framework under which all CLECs must purchase large amounts of switching capacity independent of incumbents, and additionally must experience six or nine month delays per switch, would materially impair the ability of those CLECs that require unbundled switching it to provide service.

The fact that CLECs can purchase switches does not warrant removing switching from the UNE list. Requiring CLECs to purchase switches would impair their ability to provide service because it would impose unnecessary and uneconomical levels of expense because in some markets CLECs may only need relatively modest amounts of switching capacity. CLECs should not need

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27 *Local Competition Order at* ¶ 141.

28 *Id.* at ¶ 411.

29 *Id.*

to purchase a million-dollar switch in order to switch a few calls. Further, it is not the experience of KMC that switching service is sufficiently available from third party vendors in all markets so that switching as a UNE is not required to avoid impairment of their ability to provide service. Accordingly, the Commission should redesignate local switching as a UNE.

The Commission should also redesignate tandem switching as a UNE. Simply stated, there is no practically or economically available alternative to incumbent tandem switching that would permit all CLECs to provide service at comparable cost, quality, ubiquity, and timeliness as is permitted by access to tandem switching as a UNE.[30]

4. Operations Support Systems

Operations Support Systems ("OSS") comprise the mechanisms by which CLECs obtain pre-ordering, ordering, provisioning, maintenance and repair, and billing functions associated with obtaining UNEs and services from ILECs. Access is essential to the ability of CLECs to provide service. Further, an ILEC is the only source of its own OSS. Accordingly, the Commission must keep OSS on the national list of UNEs. The Commission should require that all ILECs establish an electronic interface to facilitate access to OSS.

5. Signaling Systems and Call-Related Databases

Signaling systems and call-related databases, including LIDB, toll-free Calling, and AIN databases for the purpose of switch query and database response through the SS7 network are integral to the provision of contemporary telecommunications services. KMC submits that use of independent suppliers of database and signaling systems do not provide service at comparable cost,

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[30] *See id.* at ¶ 425.

quality, or timeliness. In particular, the costs of services from independent vendors greatly exceed incumbent UNE services. Nor do independent vendors of these services offer them everywhere. As the Commission found in the *Local Competition Order*, alternatives to ILEC signaling systems, such as in-band signaling, would provide a lower quality of service.[31] Accordingly, unavailability of ILEC signaling systems and call related databases as a UNE would impair competitors ability to provide service and this should be designated as a UNE.[32] KMC also points out that access to service management systems, which enable competitors to create, modify, or update information in call related databases, is necessary for competitors to effectively use call related databases. Accordingly, access to service management systems should also be required as part of this UNE.[33]

6. Operator Services and Directory Assistance

KMC submits that sources of operator services and directory assistance independent of the incumbent are not available at comparable cost, quality, ubiquity, and timeliness as incumbent provided services. Without access to the incumbent directory assistance database, new entrants could not provide operator services and directory assistance concerning ILEC customers.[34] Accordingly, the Commission should redesignate operator services and directory assistance as UNEs.

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31 *Id.* at ¶ 482.

32 *Id.* at ¶ 491.

33 *Id.* at ¶ 493.

34 *Id.* at ¶ 538.

7. Network Interface Device

The Network Interface Device ("NID") is the point of interconnection of the telephone network to the customer's inside wiring. For all practical purposes, it is part of the loop. KMC submits that there is no economic or practical alternative to use of the NID as a UNE that would enable CLECs to provide service. As found by the Commission, when a competitor deploys it own loops, the competitor must be able to connect its loops to customers' inside wiring, especially multi-unit buildings, in order to provide service.[35] Accordingly, the Commission should redesignate the NID as a UNE.

B. The Commission Should Establish Several New UNEs

This proceeding presents an opportunity for the Commission to examine the need for network elements to be designated as UNEs based on its three years of experience in implementation of the 1996 Act. Given that the local telecommunications marketplace is not yet competitive, the Commission should consider whether designation of additional UNEs consistent with the "necessary" and "impair" standards could help promote local service competition. Further, the Commission should examine whether, in light of technical developments, including the more realistic possibility of deployment of some advanced services, designation of additional UNEs could help assure the competitive development of these services.

KMC believes that designation of the following network elements as UNEs would promote competition and additionally comply with the "impair" standard. None are proprietary.

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[35] *Id.* at ¶ 392.

1. Conditioned Loops

The Commission has recognized that conditioned loops - loops that are free from load coils and bridge taps - are necessary in order for CLECs to provide some types of advanced services.[36] Many technologies used to provide advanced broadband services require access to conditioned loops. If a new entrant hopes to provide advanced broadband services but does not have access to conditioned loops, its ability to do so will be significantly diminished. Accordingly, the Commission should require that conditioned loops be made available as UNEs. The Commission should additionally reiterate its requirement that ILECs must condition loops on request. This will clarify that ILECs must condition loops, not just make them available as UNEs where they are already conditioned. Under these requirements, CLECs may obtained conditioned loops as UNEs on request.

2. Sub-loop Elements

Loops consist of distribution plant, drops, and electronics. A sub-loop element is merely a portion of the loop such as the drop, a portion of distribution plant such as that between the subscriber's premises and intermediate access points, or loop electronics. Access to sub-loop elements is necessary in order to bypass parts of the loop that are unsuitable for provision of some advanced services. For example, about 15% of potential customers are served through the use of digital loop carrier ("DLC") electronics in the local loop which can make it impracticable to provide advanced broadband services.[37] DLC systems aggregate and multiplex loop traffic at a remote

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[36] *UNE NPRM* at ¶ 32.

[37] Joan Engebretson, *The Great Wait*, Telephony, Jan. 4, 1999, at 26 ("Engebreston").

concentration point and deliver it to the central office via a single high-speed connection.[38] Because there is no continuous circuit from the customer to the Central Office deployment of broadband services is impractical absent sub-loop unbundling. Additionally, some broadband technologies require relatively short loop lengths (often less than 18,000 feet).[39] New entrants utilizing these technologies need access to the local loop at points closer to the end user.[40] Sub-loop unbundling can provide access to shorter loop lengths, thereby facilitating deployment of advanced broadband services.

As with the loop generally, there is no economical or practical alternative to access to ILEC sub-loop elements.[41] Thus, unavailability of sub-loop elements would significantly impair new entrants' ability to provide advanced broadband services. The Commission should require ILECs to provide unbundled access to sub-loop elements including: drops, and portions of distribution plant that can be accessed by means of interconnection at remote pedestals, vaults, and outside or underground chambers where loops are currently accessed by ILECs.

3. Dark Fiber

Dark fiber is "fiber-optic cable that has been laid into a telecommunication's provider's network but which is not 'lit' by electronics on either end of the cable," or at least not lit by

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[38] *Local Competition Order* at ¶ 383.

[39] A. Michael Noll, *Introduction to Telephones and Telephone Systems* 261 (1998) ("Noll").

[40] *Local Competition Order* at ¶ 390.

[41] Wireless local loops have not been widely deployed.

electronics provided by the owner of the cable.[42] Fiber cable is the premier telecommunications transmission facility combining low cost, high capacity, and efficiency.[43] Broader availability of fiber transmission facilities, including dark fiber, would substantially promote competition in local services. Accordingly, dark fiber should be included within the Commission's definition of transport facilities subject to the unbundling obligation. Unbundling of dark fiber would not raise network compatibility or reliability issues so long as the Commission requires the electronics used to lite the fiber to conform to New Equipment Building Standards ("NEBS") Level 1 requirements as it has done in the *Collocation Order*.[44]

It is not economically feasible for most competitive carriers entering the market to self-provision dark fiber. Moreover, new entrants have been unable to obtain the capacity of dark fiber in practical increments. Accordingly, the unavailability of dark fiber from ILECs stymies competition and continues to impair the ability of new entrants to provide services. Thus, the Commission should require that dark fiber be made available as an unbundled network element for use as both loop and transport. This can be accomplished by making dark fiber a standalone UNE, or by requiring that dark fiber be made available under the local loop and high capacity transport UNEs.

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[42] *MCI Telecommunications Corp. v. Bellsouth telecommunications, Inc.*, 7 F.Supp.2d 674, 679 (E.D.N.C. 1998) ("dark fiber falls clearly within the definition of a network element").

[43] Noll at 112-115.

[44] *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, First Report and Order and Further Notice of Proposed Rulemaking, FCC 99-48, -- FCC Rcd --, ¶¶ 34-36 (rel. March 31, 1999).

4. Inside Wiring

Intra-building or inside wiring is essentially the "last one hundred feet" of the loop. Over the last decade the Commission has taken significant steps to increase the ability of customers and competitive providers of services to install new, and reconfigure existing, customer premises wiring.[45] However, the Commission's inside wiring programs do not address situations where it is not practical or economical for CLECs to reconfigure or install new customer premises wiring. Thus, in most customer installations, especially in multi-unit dwellings, CLECs will not be able to provide service if they must essentially rewire the building in whole or in part in order to provide service. Nor would this make any sense if existing wiring is suitable for provision of services. In addition, premises owners and tenants are not likely to tolerate, or pay for, unnecessary wiring alterations and installations. Instead, CLECs must have the ability to access and use customer premises wiring in order to be able to provide service. Accordingly, the Commission should designate customer premises wiring as a UNE.

The Commission should designate premises and building entrance facilities such as junction and utility boxes, house and riser cable, and horizontal distribution plant as UNEs. This would assure CLECs are able to access the portions of customer premises wiring as are necessary to provide service.

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[45] *Review of Sections 68.104 and 68.213 of the Commission's Rules Concerning Competition of Simple Inside Wiring to the Telephone Network and Petition for Modification of Section 68-213 of the Commission's Rules filed by the Electronic Industries Association*, CC Docket No. 88-57, Report and Order and Further Notice of Proposed Rulemaking, 5 FCC Rcd 4686 (rel. June 14, 1990); *Review of Sections 68.104 and 68.213 of the Commission's Rules Concerning Connection of Simple Inside Wiring to the Telephone Network,* CC Docket No. 88-57, Order on Reconsideration, Second Report and Order and Second Further Notice of Proposed Rulemaking, 12 FCC Rcd 11897 (rel. June17,1997).

KMC acknowledges that only wiring owned by the incumbent may be declared a UNE. However, the Commission should make clear that all wiring owned by the ILEC will be a UNE even if it is on the customer side of the demarcation point. KMC stresses that any access by CLECs to customer premises wiring as UNEs will be in furtherance of relationships with customers who have requested service from the CLEC. Thus, access to wiring on the customer's side of the demarcation point will be conducted in cooperation with the customer.

The Commission should further provide, however, that there should generally be no charge for access to customer premises wiring as a UNE because in most cases ILECs have already full depreciated it.[46] Allowing ILECs to charge TELRIC for access to this wiring would permit a windfall recovery since they do not for the most part at this time have negligible costs associated with customer premises wiring.

5. DSLAMs

ILECs terminate copper loops used to provide DSL service in digital subscriber line access multiplexers ("DSLAMs") in the central office. In central offices where collocation space is not available, new entrants will not be able to provide their own DSLAMs. Moreover, it is not KMC's experience that DSLAMs available from sources independent of ILECs are, or would be, available at comparable cost, quality, ubiquity, and timeliness to DSLAMs available as UNEs. Accordingly,

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[46] The Commission has previously prohibited ILECs from exercising any ownership rights over simple inside wiring. *Inside Wiring Detariffing Order*, CC Docket 79-105, 51 Fed. Reg. 8498 (1986), paras.52, 57, *recon. in part, Inside Wiring Reconsideration Order*, 1 FCC Rcd 1190, *further recon.* 3 FCC Rcd 1719 (1988), *remanded* NARUC v. FCC, 880 F.2d 1989. The term "simple inside wiring" refers to telephone wiring installations of up to four access lines. *See* 47 C.F.R. § 68.213.

KMC submits that the unavailability of DSLAMs as a UNE could substantially impair new entrants ability to provide service and DSLAMs should be designated as a UNE.

6. Combinations

In order for CLECs to offer competitive services employing UNEs they must be able to configure their systems efficiently using combinations of UNEs. If ILECs are able to discriminate between the configurations they provide for themselves and those they permit CLECs, they will be given a distinct competitive advantage. KMC urges the Commission to promote the ability of CLECs to obtain UNE combinations.

While such functions can be accomplished by means of a multiplexer, CLECs are not always able to obtain collocation at each central office where it might be desirable. There are growing space shortages making it difficult and costly to collocate in each facility. In other situations, collocation space might be available but it is not economically justifiable because the CLEC may not have enough customer traffic to justify the expense. In still other situations, a CLEC may simply find that collocation as its standard means of interconnection is not feasible under its business plan.

In these situations, where the CLEC needs a loop and transport, it will not be able to provide service as a matter of practicality and economics unless it can obtain the loop and transport appropriately connected by means of a multiplexer as one element. This is because the CLEC will have no practical way to obtain and connect the loop and transport elements. Accordingly, the Commission should require that combinations of UNEs to be made available on a nondiscriminatory basis.

One specific combinations which should be made is the "extended link." An extended link consists of three components - a loop, multiplexing, and interoffice transport - combined as one

network element.[47] An extended link permits a new entrant to collocate in a single Central Office and provide service to customers attached to this Central Office and other outlying Central Offices. Requiring the unbundling of extended links could facilitate the rapid extension of facilities-based competition into less densely populated areas and to residential customers by enabling a new entrant to reach more customers through a single collocation space. KMC has targeted such residential customers in its business plan and would benefit from unbundling of extended links. Unbundling of extended links could also alleviate the scarcity of collocation space in the leading markets that often inhibits market entry. A new entrants' ability to provide services, especially residential service, will be significantly impaired without access to extended links because it is not economically feasible to collocate in all ILEC central offices, particularly those in outlying areas of lower population density.[48] The Commission should also require that combinations of network elements needed to provide advanced services also be provided as UNEs, such as the loop, DSLAMs and high capacity transmission.

7. High Capacity Transport Options

End-to-end high capacity transport is crucial if CLECs are to offer competitive broadband services. Therefore, in addition to dark fiber, the Commission should make available as UNEs a full range of transport options and technical capabilities to utilize them. As explained above, CLECs are not able to duplicate even a small percentage of the ILECs' ubiquitous transport networks either through self provisioning or purchase from independent providers. This makes the unbundling of

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[47] The extended link is also commonly referred to as the "enhanced extended link."

[48] In the past, collocation in a single Central Office has cost competitive carriers as much as $500,000. Engebretson at 22.

high capacity transport options imperative if CLECs are to provide xDSL or other high bandwidth services on a competitive basis. Therefore, further transport options should be available as UNEs. In addition to dark fiber, the Commission should make available all transport options that are available under tariff, including SONET rings, DS1s, DS3s, OC48s, and OC12s.

8. Multiplexing

KMC submits that Central office multiplexing ("multiplexing"), should be made available by the Commission as a UNE. Establishing a multiplexing UNE would greatly facilitate the pro-competitive goals of the Act by eliminate disputes over access and pricing to multiplexing and thereby increasing the pace of competitive network build-out.

Unbundling multiplexing capabilities is technically feasible as evidenced by the fact that and many ILECs do so, although there is often significant dispute as to the cost associated with making this service available.

Furthermore, multiplexing performs the critical functions which enable ILECs and CLECs to connect network elements efficiently by aggregating and disaggregating traffic. ILECs use multiplexing to combine network elements within their own networks. The CLECs' ability to compete would be materially impaired if they were unable to obtain unbundled access to the same functionality at nondiscriminatory prices. Moreover, self-provisioning is not a viable option because it would require significant capital expenditures on equipment and collocation. CLECs, in many cases, will not have the preexisting customer base necessary to make self-provisioning a cost-effective alternative to ILEC unbundling. Delays associated with obtaining capital, equipment, collocation , and a sufficient customer base to justify self-provisioning would likely compel CLECs to forgo offering certain service. This would leave end users with fewer choices contrary to the goals

of the Act. For these reasons, KMC believes the Commission should make multiplexing available as a UNE.

9. Data Network Elements

The provision of data network services such as ATM and frame relay switching require several specialized network elements. These network elements, including network to network interfaces ("NNIs"), user to network interfaces ("UNIs"); and fractional transport at committed information rates ("CIRs") are crucial to the provision of advanced data network services. Furthermore, recreation of these data network elements would prove prohibitively expensive. KMC therefore believes that, consistent with the Section 251(d)(2) standards for unbundling and the Section 706 mandate to encourage the deployment of advanced data services, the Commission should make these network elements available as UNEs.

VI. THE COMMISSION SHOULD REVIEW THE NATIONAL LIST OF UNES PERIODICALLY

KMC submits that the best way for the Commission to determine in light of changed market or technical conditions whether UNEs should be added to, or removed from, the national list, is through periodic reviews of the list based on a record gathered from industry comments. This would permit the Commission to update the list under the appropriate statutory standards.

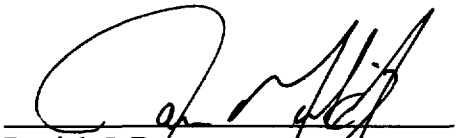
KMC does not believe that the Commission could establish preset automatic mechanisms or triggers for removing UNEs that would not entail a substantial risk of harming competition by premature removal of UNEs. The Commission cannot foresee all the circumstances in this proceeding that may warrant continuation of a network element as a UNE

The Commission should reject the idea of sunset dates for certain UNEs. As discussed, the Commission cannot predict with certainty when CLECs will no longer need a network element as a UNE. Moreover, sunset dates would undercut ILEC incentives to comply with unbundling obligations, especially as the sunset date approaches.

VII. CONCLUSION

For the foregoing reasons, the Commission should adopt the recommendations in these comments.

Respectfully submitted,



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